

REMARKS

Initially, Applicant respectfully acknowledge that the Examiner has objected to claims 4, 9, 10, 12 and 17 and has indicated that dependent claims 4, 9, 10, 12 and 17 would be allowable if rewritten in independent form including all the limitations of the base claims and any intervening claims.

Claims 1, 3-6, 8-14, and 16-18 remain pending in the application. Claims 2, 7 and 15 have been canceled without prejudice or disclaimer of the subject matter thereof.

Reconsideration of the rejections and allowance of the pending application in view of the foregoing amendments and following remarks are respectfully requested.

In the Office Action, claims 1-3, 5-8, 13-16 and 18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Webber (U.S. Patent No. 5,491,670). This rejection is respectfully traversed.

Independent claims 1 and 13 have been amended to more clearly define a structural feature of an embodiment and to more clearly distinguish over the applied prior art reference by further reciting a memory that stores images output from the image capturer, and a comparator that compares an image presently output from the image capturer with an image previously stored in the memory, and claim 6 has been amended to further recite the above-noted combination of features in the method. No new matter is introduced by the present amendment. In this regard, the Examiner's attention is directed to, inter alia, canceled claim 2 of Applicant's application.

It is a feature of the present embodiment to provide a mobile robot and a method for measuring a moving distance thereof capable of calculating a moving distance accurately by measuring direction and motion of a mobile robot with an image sensor.

To achieve the above-noted object, a mobile robot of the presently claimed embodiment, as recited in amended claim 1, includes, inter alia, an image capturer that captures, at predetermined intervals, images of a bottom surface in accordance with motion of a mobile robot by using an image sensor, a memory that stores images output from the image capturer, a displacement measurer that measures displacement with respect to the captured image, a comparator that compares an image presently output from the image capturer with an image previously stored in the memory, and a microcomputer that outputs an actual moving distance by direction and motion of the mobile robot on the basis of a value of the measured displacement and a value of the compared images.

The reference cited to support the rejection does not disclose such a combination of features, particularly the image capturer that captures images of a bottom surface and the comparator that compares an image being presently output from the image capturer with an image being previously stored in a memory.

The Weber reference refers to and is concerned specifically with a sonic positioning system that includes beacons, sound generation means and sound detection means. In particular, the sonic positioning system determines a position of an object, by detecting sound being generated from the beacons placed at a specific area. The Weber reference also discloses that the video cameras are usable in the sonic positioning system.

However, the ordinary skilled person will predict that the sonic positioning system having the above-noted features, although adopting the video cameras corresponding to the image capturer of the presently claimed embodiment, captures the beacons, not a

bottom surface. Therefore, the sonic positioning system adopting the video cameras cannot capture a bottom image, and thus cannot even compare the images captured by the video cameras.

Thus, Weber does not disclose each and every feature recited in claim 1, and thus cannot anticipate at least claim 1 of the present application.

Independent claims 6 and 13 also include the above-noted combination of features, as noted above with respect to claim 1.

Independent claims 1, 6 and 13 are now in condition for allowance at least in view of the amendments and the above-noted remarks, and claims 3-5, 8-12, 14 and 16-18 dependent thereon, respectively, are also submitted to be in condition for allowance in view of their dependence from the allowable base claims and also at least based upon their recitations of additional features of the present invention.

It is respectfully requested, therefore, that the rejection under 35 U.S.C. 102(b), be withdrawn and that an early indication of the allowance of the application be given.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based on prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to be attached thereto.

Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
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